

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-9, 11-20, 22-23, and 31-32 are active in this application. Claims 1-4, 11, 13, 17, and 22 are amended, Claims 10 and 21 are canceled, and Claims 31 and 32 are added by present Amendment. Applicants believe that Claims 31 and 32 are supported by the originally filed specification, and do not introduce any new matter.

In the outstanding Official Action, the title was objected to; Claims 1-12 and 17 were rejected under 35 U.S.C. §112, second paragraph; Claims 1 and 9 were rejected under 35 U.S.C. §102 (b) as being anticipated by Dawson et al. (U.S. Pat. No. 5,998,293 hereinafter Dawson); Claims 1-8 and 13-19 were rejected under 35 U.S.C. §103 (a) as being unpatentable over the Applicant's Figure 23 in view of May et al. (U.S. Pat. No. 6,566,244 B1 hereafter May); Claims 9, 12, 20, and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Applicant's Figure 23 in view of May as applied to Claims 1 and 13, and further in view of Farrar (U.S. Pat. No. 5,994,777). Claims 10 and 11 were rejected under 35 U.S.C. §112, but were indicated as containing allowable subject matter. Claims 21 and 22 were objected to as being dependent upon a rejected base claim, but indicated as allowable if rewritten in independent form.

Applicants acknowledge with appreciation the indication that Claims 10, 11, 21 and 22 contain allowable subject matter.

Applicants submit new Claims 31 and 32 are supported by the originally filed specification. Claims 31 and 32 depend on Claims 1 and 13 respectively, "further comprising a dielectric second support plug contacting the foundation and the support layer under the support layer, the second support plug consisting essentially of the same material as the first

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 23 and 24. This sheet, which includes Fig. 23 and 24, replaces the original sheet including Fig. 23 and 24.

Attachment: Replacement Sheet

support plug.” In the non-limiting embodiments of the invention illustrated in Fig. 1, the second plug is labeled 22 (a, b, c). In Fig. 1, the support plug 22 is provided under the interconnection layer 24. However, in the specification the only limitation relative to the position on the second plug is “the support plug 22 is provided at the region provided with no connection plug 21 in the interlayer dielectric film 13.”<sup>1</sup> According to Fig. 4 and the corresponding description in the specification, the “support plugs 22a to 22c and a material film for the support layer 23 are deposited on the entire surface of the semiconductor substrate 2...”<sup>2</sup> In Fig. 4 the support plug 22 is provided under the support layer 23. Fig. 6 shows that part of the support layer 23 is removed at the position where the interconnection layer 24 is formed in a subsequent step. The support plug 22 may though remain under the support layer 23 in the region where the interconnection layer 24 is not formed.

In response to the objection to the title, the title is amended herewith to be more clearly directed to the claimed invention. Accordingly, the objection to the title is believed to have been overcome.

In response to the objection to the drawings, Figures 23 and 24 have been labeled as “Background Art”. Applicants respectfully submit the objection to the drawings has been overcome.

In response to the 35 U.S.C. § 112, second paragraph rejection, Claims 1-4 and 17 have been amended. In Claims 1-4, instead of “second Young’s Modulus” it is now recited “first Young’s modulus” and vice versa, instead of “first Young’s Modulus” it is now recited “second Young’s Modulus”. The rejection is moot based on the change in labeling of the recited Young modulus. In Claim 17, line 9, the phrase “the second support plug” is replaced with “the second connection plug”. Support for these amendments is found in Applicants’

---

<sup>1</sup> Specification, at page 13, lines 16-18.

<sup>2</sup> Specification, at page 15, lines 22-24.

originally filed specification. No new matter is added. Applicants respectfully submit that in light of the above changes, the rejection under 35 U.S.C. § 112, second paragraph has been overcome.

In the light of the Office Action's indication that Claim 10 contains allowable subject matter, Claim 1 has been amended to include the limitation recited in Claim 10. Applicants respectfully submit that Claim 1 and all the claims depending therefrom, are not anticipated by the cited references. Claim 10 has been canceled, and Claim 11 has been amended to depend from amended Claim 1.

Claim 13 has been amended to recite the invention as claimed in original Claim 21. Applicants respectfully submit that in view of the Office Action's indication that original Claim 21 contains allowable subject matter, Claim 13 and all the claims depending therefrom, now patentably define over the cited references. Claim 21 has been canceled, and Claim 22 has been amended to depend from amended Claim 13.

Accordingly, in view of the present amendment, no further issues are believed to be outstanding and the present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Eckhard H. Kuesters  
Attorney of Record  
Registration No. 28,870

Customer Number

22850

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)